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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/643,364	08/19/2003	YanYan Wu	878.0037.U1(US)	4806

29683 7590 02/21/2006

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EXAMINER
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VO, NGUYEN THANH

ART UNIT	PAPER NUMBER
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2685

DATE MAILED: 02/21/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/643,364	<b>Applicant(s)</b> WU ET AL.	
	<b>Examiner</b> Nguyen T. Vo	<b>Art Unit</b> 2685	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-31,33,34 and 36 is/are pending in the application.  
     4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-31,33,34 and 36 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
     a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____.  |

## **DETAILED ACTION**

### ***Specification***

1. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 19, 28-29 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As to claim 19, the recitation "according to any once of claims 15" at line 1 renders the claim indefinite because it has no clear meaning.

As to claim 28, the recitation "said component" lacks clear antecedent basis.

As to claim 29, the recitation "said component" lacks clear antecedent basis.

### ***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1-2, 4-18, 20-24, 26-27, 29-30, 33, 36 are rejected under 35

U.S.C. 102(e) as being anticipated by Kopmeiners (5,917,865, cited by examiner).

As to claims 1, 33, 36, Kopmeiners discloses a gain control circuit for causing a power level of a signal to converge on a power level reference signal (see column 6 lines 9-14, lines 46-52), said circuit being arranged, in a first adjustment, to determine whether the power level of said signal falls within a predetermined range containing the power level reference signal (see column 5 lines 8-11, lines 26-35) and, if not, to adapt said signal in a manner predetermined to cause the power level of said adapted signal to fall within said predetermined range (see column 5 lines 8-63) and, in a second adjustment, to measure the power level of said adapted signal and to further adapt said adapted signal using the measured power level of said adapted signal thereby causing the power level of said further adapted signal to converge on the power level of said reference signal (see column 6 lines 2-14, lines 46-57). Kopmeiners thus discloses all the claimed limitations.

As to claim 2, Kopmeiners discloses all the claimed limitations (see column 6 lines 2-14, lines 46-57).

As to claims 4-5, Kopmeiners discloses all the claimed limitations (see column 5 lines 36-63).

As to claims 6-8, Kopmeiners discloses all the claimed limitations (see column 5 lines 8-62; column 6 lines 1-57).

As to claims 9-10, Kopmeiners discloses all the claimed limitations (see column 5 lines 41-63).

As to claims 11-12, Kopmeiners discloses all the claimed limitations (see column 7 lines 33-43).

As to claim 13, Kopmeiners discloses all the claimed limitations (see column 1 lines 6-10; column 5 lines 8-11; column 6 lines 46-52).

As to claim 14, Kopmeiners discloses all the claimed limitations (see column 5 lines 8-12; column 6 lines 2-14, lines 46-52).

As to claims 15-18, 27, Kopmeiners discloses all the claimed limitations (see column 4 lines 10-14).

As to claims 20-21, Kopmeiners discloses all the claimed limitations (see column 5 lines 8-63; column 6 lines 2-9).

As to claim 22, Kopmeiners discloses all the claimed limitations (see column 5 lines 41-44; see also figure 3 for the gain axis).

As to claim 23, Kopmeiners discloses all the claimed limitations (see figure 3 for the gain axis which includes negative limit).

As to claims 24, 26, Kopmeiners discloses all the claimed limitations (see column 5 lines 8-63).

As to claim 29, Kopmeiners discloses all the claimed limitations (see column 4 lines 31-47).

As to claim 30, Kopmeiners discloses all the claimed limitations (see column 5 lines 8-11).

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

8. Claims 3, 25, 28, 31, 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kopmeiners.

As to claims 3, 28, Kopmeiners fails to disclose determining whether the power level of said signal falls within the predetermined range containing the power level reference signal by checking whether the power level has clipped. The examiner, however, takes Official Notice that it is known in the art to determine whether the power level of signal falls within a predetermined range by checking whether the power level has clipped. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Kopmeiners to determine whether the power level of signal falls within a predetermined range by checking whether the power level has

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clipped, in order to have a simple and effective way of determining whether the power level of said signal falls within the predetermined range containing the power level reference signal.

As to claim 25, Kopmeiners fails to disclose that the AGC circuit conforms to a first, second, third or fourth generation telecommunications standard as recited in the claim. The examiner, however, takes Official Notice that using a AGC circuit conforming to a first, second, third or fourth generation telecommunications standard is known in the art. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Kopmeiners with the conventional first, second, third or fourth generation telecommunications standard, in order to enjoy the advantages of the AGC circuit in Kopmeiners such as a very high-speed adjustment of RF receiver gain (as suggested by Kopmeiners at column 2 lines 12-18).

As to claims 31, 34, Kopmeiners does disclose a very high-speed adjustment of RF receiver gain (see column 2 lines 12-18), but fails to disclose causing the power level of the signal to converge on the power level reference signal using no more than two adjustments, as specified in the claim. Those skilled in the art, however, would have recognized that the above difference would not render the claim patentable over Kopmeiners because it would merely depend on how fast one would like to converge the power level of the signal on the power level reference signal. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Kopmeiners as claimed, in order to increase the speed of the RF receiver gain adjustment.

***Allowable Subject Matter***

9. Claim 19 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

As to claim 19, the applied references fail to disclose or render obvious the claimed limitations that the first amplifier is instructed to change gain only once during said first and second adjustments, as specified in the claim.

***Conclusion***

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Li (6,843,597); Bhattacharjee (6,952,132); Hedberg (4,870,370) disclose coarse and fine GAC.

Dalglish (US 2003/0211828 A1) discloses AGC circuit.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nguyen T. Vo whose telephone number is (571) 272-7901. The examiner can normally be reached on Monday-Friday.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Urban can be reached on (571)272-7899. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Nguyen Vo

  
2-14-2006

**NGUYENT.VO**  
**PRIMARY EXAMINER**